

Application Serial No. 10/773,798  
Reply to office action of March 24, 2005

PATENT  
Docket: CU-4114

### **REMARKS/ARGUMENTS**

#### **REQUEST TO CHANGE THE ATTORNEY DOCKET NUMBER**

The applicant acknowledges the Notice of Acceptance of Power of Attorney of April 20, 2005. In addition, the applicant respectfully requests the change of the attorney docket number to "**CU-4114 WWP**." The attorney docket number has been reassigned from the previous one of P4063/VIPC.

#### **REMARKS**

Reconsideration is respectfully requested.

Claims 1-2 are pending in the present application before this amendment. By the present amendment, claim 2 has been canceled without prejudice, and claim 1 has been amended. Claims 3-5 have been added. No new matter has been added.

In the office action, claim 1 stands objected to for containing informalities. Appropriate corrections have been made, and withdrawal of the objection is respectfully requested.

In the office action, claims 1-2 stand rejected under 35 U.S.C. § 112, ¶2 as being indefinite. Appropriate amendments have been made to render the issue of indefinites moot. Withdrawal of the rejection is respectfully requested.

In the office action, claim 1 stand rejected under 35 U.S.C. §102(b) as being anticipated by a Japanese Patent Reference JP-212747 (Sadao). The "et al." suffix which may appear after a reference name is omitted in this paper.

The Japanese text of Sadao without an English translation was received from the USPTO. The applicant has obtained published English abstract of Sadao. It appears that there is no counterpart U.S. patent reference of Sadao.

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Sadao does not teach the presently claimed invention.

In the presently claimed invention, the drain valve having the elongated rod connected to the cap (3) is disposed inside the drainpipe, and the cam 50 is mounted inside the drainpipe.

In Sadao FIG. 1, the cam 7 is not mounted inside the pipe through which liquid would flow. As best understood from FIG. 1 of Sadao, the cam 7 is located in a mechanism having the push button 2, and this mechanism is electrically connected by wire 14 to another mechanism that appears to have the cap 30 and the drainpipe.

Accordingly, Sadao does not teach or disclose claim 1, as amended, and an indication of allowable subject matter is respectfully requested.

In the office action, claims 1-2 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 5,048,556 (Grumelot) and Sadao.

The applicant respectfully disagrees.

As to claim 1, the applicant points out that the claimed cam is mounted inside the drainpipe through which liquid is discharged, an example of which is shown in FIG. 2 of the present application.

Sadao does not teach this claimed feature as asserted above.

Grumelot like Sadao teaches the cam 66 (FIG. 1) to be mounted externally. Grumelot's design keeps the cam 66 and its peripheral parts away from the flow of liquid so that cam 66 does not come into contact into the flowing liquid. Grumelot teaches the valve sleeve 24 (in FIG. 1) having holes such as shown in FIGS. 4-7 through which liquid will flow. Grumelot's cam 66 is mounted to the cap 46 (FIG. 1, col., 5, line 64 to col. 6, line 40), and all of the other components such as guide 60 for supporting and

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operating the cam 66 are located outside the structure of the valve sleeve 24.

Therefore, even if Grumelot and Sadao are combined, the combination still does not teach the presently claimed invention as shown in FIG. 2 as an embodiment where the cam 50 is mounted inside the drainpipe and comes in contact with the flowing liquid.

Further as to claim 1, the cam is claimed to have the —circular— shape as this is shown in FIG. 2 of the present application. Neither Sadao nor Grumelot teaches or suggests the claimed —circular cam— whether the references are considered individually or in combination.

Yet further as to claim 1, the presently claimed does not require a valve sleeve 24 as this is required in Grumelot.

Neither Grumelot nor Sadao teach or disclose (either individually or in combination) the claimed upper spring housing and the lower spring housing (such as FIG. 1, 61 and 62; and FIG. 5) by which the spring is housed inside the inner cylindrical opening to exert pressure on the elongated rod by which the cap of the drain valve is closed during the off state. Grumelot teaches forming a rib 30 directly in the valve sleeve 24 (col., 5, lines 43-47).

Because Grumelot does not teach or suggest the claimed upper and lower spring housing, Grumelot teaches centering vanes 44 to guide axial movement of the stem 34. No such vanes 44 are required according to the presently claimed invention, because the upper and lower spring housings (such as FIG. 1, 61 and 62) that not only (1) houses the spring to allow exertion of a bias force on the rod 31 to retain the cap 30 in a closed position during the off state, but also (2) stabilizes the axial movement of the rod 31. As shown in FIGS. 1 and 5 of the present application, the —outer cylindrical

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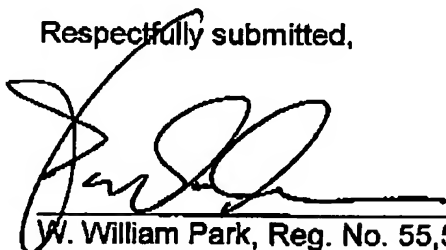
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openings-- such as 61c and 62c allows liquid flow and the inner cylindrical opening (not numbered in FIG. 5) receives the spring and a portion of the elongated rod. The inner cylindrical opening as shown in FIG. 5 (although not numbered) guides the elongated rod of the drain valve 30 to move up and down (as shown in FIGS. 1-2 and 4) without the need of the additional features like the centering vanes 44 required in Grumelot. Therefore, the presently claimed invention substantially different from the cited prior art references, and Sadao or Grumelot (individually or in combination) does not teach or suggests the presently claimed invention.

For the reasons set forth above, the applicant respectfully submits that claims 1 and 3-5, now pending in this application, are in condition for allowance over the cited references. This amendment is considered to be responsive to all points raised in the office action. Accordingly, the applicant respectfully requests reconsideration and withdrawal of the outstanding rejections and earnestly solicits an indication of allowable subject matter. Should the Examiner have any remaining questions or concerns, the Examiner is encouraged to contact the undersigned attorney by telephone to expeditiously resolve such concerns.

Respectfully submitted,

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